



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/003,353	11/01/2001	William R. Kennedy	KDY 9485	5231
321 7590 12/21/2007				
SENNIGER POWERS				
ONE METROPOLITAN SQUARE				
16TH FLOOR				
ST LOUIS, MO 63102				
EXAMINER				
A. PHU DIEU TRAN				
ART UNIT		PAPER NUMBER		
3633				
NOTIFICATION DATE		DELIVERY MODE		
12/21/2007		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspatents@senniger.com

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

*Ex parte* WILLIAM R. KENNEDY and JOHN M. KENNEDY

---

Appeal 2006-0128  
Application 10/003,353  
Technology Center 3600

---

Decided: December 19, 2007

---

Before ANITA PELLMAN GROSS, JENNIFER D. BAHR, and JOSEPH  
A. FISCHETTI, *Administrative Patent Judges*.

BAHR, *Administrative Patent Judge*.

DECISION ON REQUEST FOR REHEARING

William R. Kennedy and John M. Kennedy (Appellants) filed a Request for Rehearing under 37 C.F.R. § 41.52 (hereinafter “Request”) on September 19, 2006, from the decision from this Board mailed July 31, 2006 (hereinafter “Decision”).<sup>1</sup> The Decision affirmed the rejection of claims 1-9,

---

<sup>1</sup> Judge Frankfort has retired and Judge Fischetti replaces him on the panel.

14, and 31-45 under 35 U.S.C. § 103(a) as unpatentable over Kennedy (Re. 36,853, issued September 5, 2000) in view of Zen (US 6,481,179 B2, issued November 19, 2002).

Appellants' Request contends that the Board misapprehended Zen's disclosure. Specifically, Appellants argue that the Board's statement that "the core has a force-transmitting relationship with the panels constituting the panels and core as an integral stress-resistant structure that is extremely strong" (Decision 5) **"is factually incorrect"** (Request 1).

In support of this contention, Appellants argue **"Zen makes no statement or suggestion that its foam core has a 'force-transmitting relationship with the panels'"** (Request 1). While Zen may not use the term "force-transmitting relationship" to describe the relationship between the foam core and the panels, the Board clearly explains the basis for its determination that Zen's foam core has a force-transmitting relationship with the panels on pages 5 and 7 of the Decision. Specifically, the Decision explains that "Zen includes integrally molded bracing or rebar-type elements (12) that provide at least indirect mechanical coupling of the core material to the steel cladding panels (3)" (Decision 5). The Decision further points out that

[g]iven the manner of constructing the steel clad door of Zen (col. 2, lines 18-23 and col. 2, line 66 – col. 3, line 4), we find that, just like in appellant's door panel,<sup>[2]</sup> the polyurethane material

---

<sup>2</sup> Appellants' Specification states that "[t]he filling 33 is preferably a polyethylene foam having the propensity of bonding to the panels (and door

foamed into the interior of the door of Zen will have the propensity to bond to the steel cladding panels (3) and to the elements (5, 6, and 7) of the door frame (2) by adhesion and thereby establish a force-transmitting relationship between the core and the cladding panels.

Decision 7.

Appellants further argue that **“Zen does not teach or suggest that the foam core adds any strength to the door, much less makes the structure ‘extremely strong’”** (Request 1-2). This argument is of little relevance, because Appellants’ claims do not require that the core itself add any strength to the door, and the Decision does not state that the core itself adds strength to the door. Rather, the Board found that the polyurethane material foamed into the interior of the door of Zen will have the propensity to bond to the steel cladding panels and elements of the door frame by adhesion and thereby establish a force-transmitting relationship between the core and the cladding panels (Decision 7), as called for in Appellants’ claims, and that the door structure is “extremely strong” (Decision 5; Zen, col. 1, ll. 13-14).

Appellants additionally argue that the combined teachings of Kennedy and Zen would not have suggested the claimed invention to one of ordinary skill in the art (Request 2). According to Appellants, at most, Zen would

---

frame 7) by adhesion thus establishing the force-transmitting relationship therewith” (Spec. 5:15-18). It is thus the adhesion of the foam to the panels and door frame that establishes the force-transmitting relationship.

suggest adding a core to a door for its insulation properties, a feature not needed for a mine door (Request 2).

We note, at the outset, that while the requirement of demonstrating a teaching, suggestion, or motivation (the TSM test) to combine known elements in order to show that the combination is obvious may be “a helpful insight,” it cannot be used as a rigid and mandatory formula. *KSR Int’l. Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1741 (2007).

When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability. For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill.

*Id.* at 1740. We must ask whether the improvement is more than the predictable use of prior art elements according to their established functions.  
*Id.*

As pointed out in the Decision, on page 6,

it would have been readily apparent to one of ordinary skill in the art from a reading of Zen that the steel clad door (1) therein would be strong and rigid, while at the same time being relatively lightweight, fire-resistant, and inexpensive to manufacture. Thus, given the teachings of Zen and

the requirements in Kennedy for a door system that is lightweight, yet sturdy and resistant to flexure (col. 1, lines 34-36), . . . a steel clad door like that taught in Zen would have been an obvious selection for one of ordinary skill in the art to have made for use in the mine door system of Kennedy.

In light of the above, Appellants' Request does not demonstrate reversible error in the Decision affirming the rejection of claims 1-9, 14, and 31-45 under 35 U.S.C. § 103(a) as unpatentable over Kennedy in view of Zen.

#### CONCLUSION

Appellants' Request has been granted to the extent of our reviewing the Decision mailed July 31, 2006 affirming the rejection of claims 1-9, 14, and 31-45 under 35 U.S.C. § 103(a) as unpatentable over Kennedy in view of Zen but is denied with respect to our making any modification thereto.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv) (2007).

DENIED

Appeal 2006-0128  
Application 10/003,353

hh

SENNIGER POWERS  
ONE METROPOLITAN SQUARE  
16TH FLOOR  
ST LOUIS, MO 63102